

A new species of genus *Eresus* from Algeria and Tunisia (Araneida : Eresidae)

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Abstract

A new species of the spider genus *Eresus*, family Eresidae, is described from Algeria and Tunisia and named *Eresus jerbae*.

Keywords: Spiders, Eresidae, *Eresus jerbae*, Tunisia, Algeria, North Africa, Taxonomy, new species.

Introduction

Among the 16 species and 7 subspecies of genus *Eresus* Walckenaer, 1805 (Roewer, 1954; Platnick, 2005), four species were recorded from Algeria: *E. albopictus* Simon, 1873b, *E. algericus* El-Hennawy, 2004a, *E. cinnaberinus latefasciatus* Simon, 1910, and *E. solitarius* Simon, 1873a; and only *E. cinnaberinus* (Olivier, 1789) was recorded from Tunisia (Simon, 1910).

During my work on reviewing the spiders of genus *Eresus* in Egypt (El-Hennawy, 2004b), I examined specimens from Muséum National d'Histoire Naturelle, Paris (MNHN) to find that there are misidentified specimens as *E. petagnae* from Tunisia and *E. semicanus* from Algeria. These specimens are not matching with any of the known descriptions of *Eresus* species. They belong to another species, which is described below as a new species. The description only depends on the material deposited in MNHN.

All measurements were taken in millimetres.

Abbreviations used: ALE = anterior lateral eye; AME = anterior median eye; Id = eyes inter-distances; L = length; PLE = posterior lateral eye; PME = posterior median eye; TL = total length; W = width.

***Eresus jerbae* new species**
(Figs. 1-4. Tables 1-2.)

Type Material: Holotype: Female. Tunisia: Djerba (Ltr.), (MNHN) bottle no. 471 (tube no. AR 835), misidentified as *Eresus petagnae*.

Other Material: 1♀, 2j Tunisia, Djerba (Ltr.), (MNHN) bottle no. 471 (tube no. AR 835) misidentified as *Eresus petagnae*; 1♀ Algeria, Birin (G. Seurat 1913), (MNHN) bottle no. 471 (tube no. AR 842) misidentified as *Eresus semicanus*.

Diagnosis: Female of this species is similar to the female of *Eresus semicanus* Simon, 1908. Its genitalia is differentiated by the presence of two small depressions adjacent to the anterior extremities of the vulvae (Figs. 1-2; white arrows) instead of the single wide depression of *E. semicanus* (El-Hennawy, 2004b).

Etymology: The species name is a noun in apposition taken from the type locality.

Description: Female (Holotype): TL 13.06; Cephalothorax L 3.67; Cephalic part: L 2.72, W 2.97; Thoracic part: W 2.80. Crimson red, covered by creamy white hairs mixed with light brown hairs in the cephalic area, hairs generally less in density in the thoracic area. Cephalic area gradually inclined into thoracic area. Cephalothorax L : W anteriorly = 1.24; L : W posteriorly = 1.31.

Eyes: posterior medians (PME) largest; $2\frac{1}{2}$ times larger than anterior medians (AME); posterior laterals (PLE) less than $1\frac{1}{2}$ the diameter of the AME; ALE and PLE equal. Eye measurements (diameters and interdistances): AME 0.10, ALE 0.14, PME 0.25, PLE 0.14, AM-AM 0.14, AL-AL 2.28, PM-PM 0.31, PL-PL 2.01, AM-AL 0.97, AM-PM 0.07. (Id PME : Id AME = 2.21; Id PLE : Id ALE = 0.88).

Sternum (L 2.12) and coxae: lighter than cephalothorax. Labium (L 0.95), maxillae (L 1.32) and chelicerae: like cephalothorax; covered by light brown hairs mixed with white hairs. Chelicera with strong boss and a black tooth against the fang; its internal edge is black.

Legs and pedipalps: orange-brown covered by creamy white hairs. Tarsi, metatarsi and tibiae of legs I, II partly darker. Tarsi and tibiae of pedipalps darker. Pedipalp with a claw.

Table 1: Legs measurements (mm)

Leg	I	II	III	IV
Femur	2.12	1.85	1.59	2.54
Patella	1.22	1.17	1.17	1.38
Tibia	1.22	1.01	0.90	1.59
Metatarsus	1.01	0.95	0.85	1.27
Tarsus	0.85	0.79	0.48	0.58
Total length	6.42	5.77	4.99	7.36

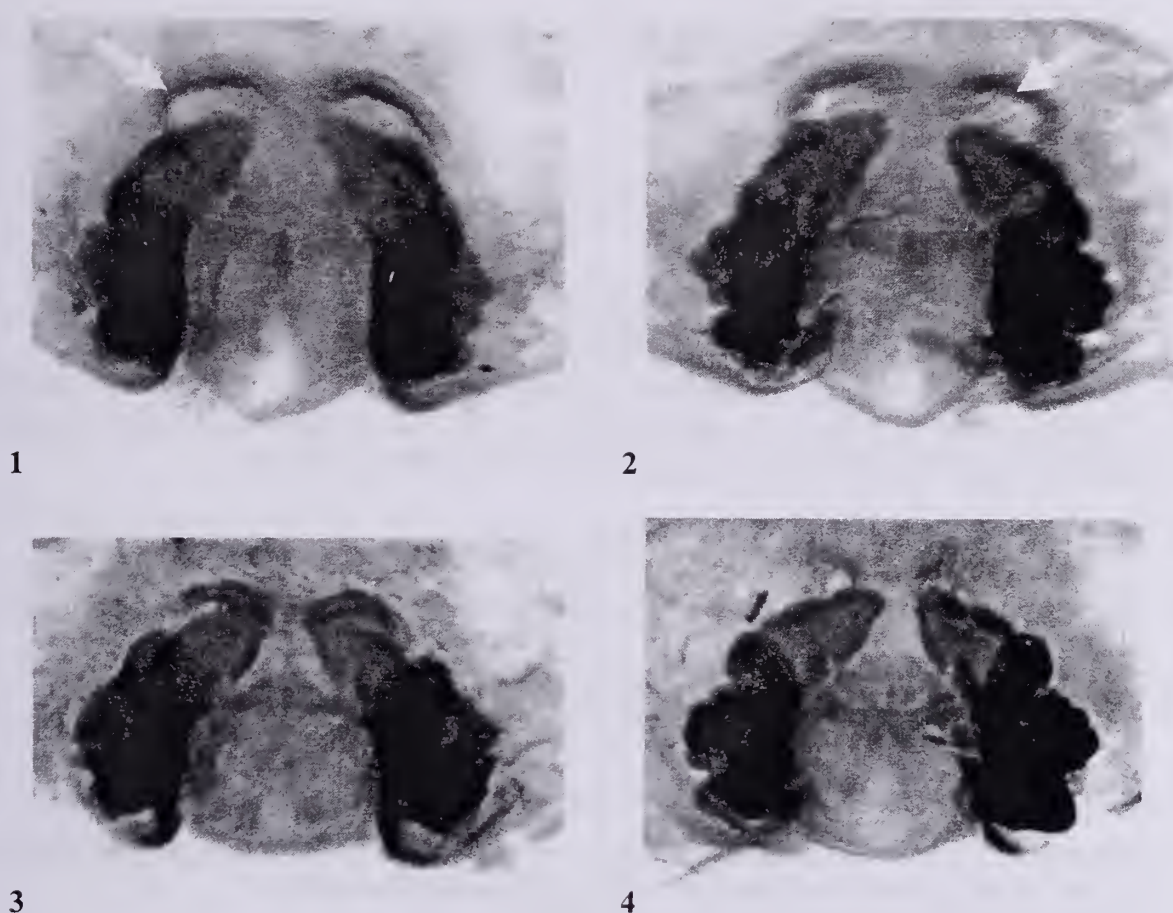
Relative length of legs 87 : 78 : 68 : 100. Leg formula IV-I-II-III.

L leg I : L cephalothorax = 1.75.

Spination pattern: spines only on ventral side of tarsi and metatarsi, and distally on tibiae; few on legs I & II, numerous on legs III & IV.

Abdomen: L 10.61; yellowish white, covered by light brown hairs. Cribellum: bipartite.

Genitalia: Epigynum of this species is similar to that of the female of *E. semicanus* Simon, 1908. It has two small depressions adjacent to the anterior extremities of the vulvae (Figs. 1-2; white arrows) instead of the wide single depression between the chitinous ridge and chitinous plate of *E. semicanus* (El-Hennawy, 2004b).



Figs. 1-4: *Eresus jerbae* n.sp. 1-2. Holotype ♀ (Jerba Island, Tunisia). 3-4. Paratype ♀ (Birine, Algeria). 1, 3. Epigynum, ventral view. 2, 4. Vulvae, dorsal view.

Measurements of Other Material:

A. 1♀ Tunisia, Djerba (Ltr.), (MNHN) bottle no. 471 (tube no. AR 835) misidentified as *Eresus petagnae*.

TL 13.06; Cephalothorax L 4.49; Cephalic part: L 3.65, W 4.16; Abdomen L 9.38

B. 1♀ Algeria, Birin (G. Seurat 1913), (MNHN) bottle no. 471 (tube no. AR 842) misidentified as *Eresus semicanus*.

TL 13.87; Cephalothorax L 5.44; Cephalic part: L 3.91, W 4.25; Thoracic part: W 3.65. Cephalothorax L : W anteriorly = 1.28; L : W posteriorly = 1.49.

Sternum L 2.97; Labium L 0.90; Maxillae L 1.64. Abdomen L 9.79

Eye measurements (diameters and interdistances): AME 0.14, ALE 0.17, PME 0.30, PLE 0.17, AM-AM 0.17, AL-AL 3.18, PM-PM 0.48, PL-PL 2.86, AM-AL 1.24, AM-PM 0.09. (Id PME : Id AME = 2.82; Id PLE : Id ALE = 0.90).

Table 2: Legs measurements (mm)

Leg	I	II	III	IV
Femur	2.91	2.38	2.12	3.18
Patella	1.38	1.43	1.22	1.85
Tibia	1.59	1.38	1.32	2.01
Metatarsus	1.59	1.32	1.17	1.75
Tarsus	1.01	0.95	0.58	0.85
Total length	8.48	7.46	6.41	9.64

Relative length of legs 88 : 77 : 66 : 100. Leg formula IV-I-II-III.
L leg I : L cephalothorax = 1.56.

Male: Unknown.

Distribution: **Algeria:** Birine, about 125 km south of Alger (Algiers). **Tunisia:** Jerba island (about 33°47'31"N 10°53'51"E).

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References

- El-Hennawy, H.K. 2004a. A new species of *Eresus* from Algeria (Araneida : Eresidae). *Serket*, 9(1): 1-4.
- El-Hennawy, H.K. 2004b. Review of spiders of genus *Eresus* in Egypt (Araneida : Eresidae). *Serket*, 9(1): 25-35.
- Olivier A.G. 1789. Araignée, Aranea. *Encycl. méth. Hist. nat. Ins. Paris*, 4: 173-240.
- Platnick, N. I. 2005. *The world spider catalog*, version 5.5. American Museum of Natural History, online at <http://research.amnh.org/entomology/spiders/catalog/index.html> [Family Eresidae, last updated November 11, 2004]
- Roewer, C.F. 1954. *Katalog der Araneae von 1758 bis 1940, bzw. 1954*. Vol. 2, part b. Bruxelles.
- Simon, E. 1873a. Aranéides nouveaux ou peu connus du midi de l'Europe. 2e Mémoire. *Mémoires de la Société Royale des Sciences de Liège*, (2) 5: 187-351, pls. 1-3 (sep. pp. 1-174).
- Simon, E. 1873b. Études arachnologiques. 2e Mémoire. III. Note sur les espèces européennes de la famille des Eresidae. *Annales de la Société Entomologique de France*, (5) 3: 335-358, pl. 10 figs. 8-13.
- Simon, E. 1910. Catalogue raisonné des arachnides du nord de l'Afrique (1^{re} partie). *Annales de la Société Entomologique de France*, 79: 265-332.